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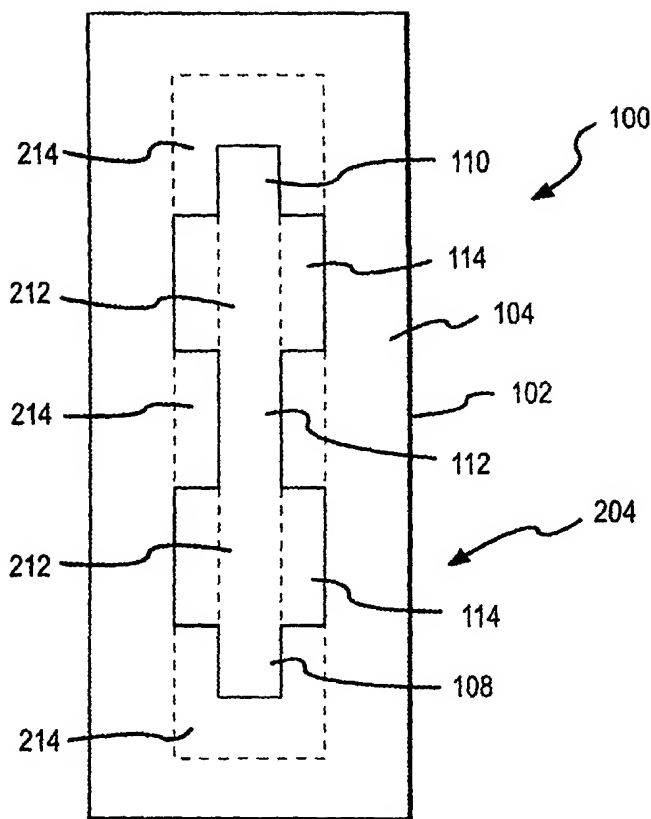
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[Continued on next page]

(54) **Title:** ANTENNA ARRAYS AND METHODS OF MAKING THE SAME



(57) **Abstract:** The present invention provides an antenna array. The antenna array comprises a substrate (102) having a first side and a second side opposite the first side. The first side has a first conductor (106) comprising narrow elements (112) and wide elements (114). The second side has a second conductor (206) comprising narrow elements (212) and wide elements (214) such that the first conductor narrow elements are above the second conductor wide elements and the first conductor wide elements are above the second conductor narrow elements. The first conductor further has a feed element (108) and a terminating element (110).

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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H01Q 1/38
US CL : 343/700ms

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 343/ 700ms, 872, 789, 731

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST, WEST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ---	US 5,339,089 A (Dienes) 16 August 1994 (16.8.1994), fig. 3a	1-13, 17-24, 26-28, 30-41 and 47-53
Y		-----
Y	US 4,475,107 A (Makimoto et al.) 2 October 1984 (2.10.1984), col. 1	14-16, 25, 29 and 42-14-16, 25 and 29
Y	US 5,075,820 A (Juskey et al.) 24 December 1991 (24.12.1991), col. 2	42-46

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"P" document published prior to the international filing date but later than the priority date claimed	

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